

August 7, 2015

**SOUTHERN UTE INDIAN TRIBE  
ENVIRONMENTAL PROGRAMS DIVISION**

**Job Hazard Analysis**

**A.** Project Title: Gold King Mine Release Water Quality Sampling

**B.** Purpose: To conduct an intensive evaluation of water quality parameters to determine impacts from Gold King Mine release on the Animas River within the contiguous boundaries of the Southern Ute Indian Reservation.

**C.** Start Date/End Date: August 5, 2015 to August 5, 2016.

**D.** Coordination Requirements: Several employees within the Environmental Programs Division will participate in this data collection effort. They will be notified at least two days in advance that their assistance will be necessary.

**E.** Personnel Requirements: At a minimum, two personnel each, one of which will be appointed team leader will conduct sampling efforts.

**F.** Hazard(s) (Anticipated and Recognized):

1. Hazards associated with driving:

- a. driving over highways, county roads dirt and occasionally unimproved dirt roads to various sampling locations,
- b. driving vehicles over uneven, rocky and occasionally very slick terrain,
- c. parking vehicles at sampling sites including backing, and
- d. vehicle breakdowns such as engine failure, flat tires, etc.
- e. encountering large vehicles such as water trucks and wide load vehicles associated with ongoing oil and gas activities.

2. Individual hazards:

- a. tripping and falling both when walking over uneven terrain and in streams,
- b. drowning,
- c. acute onset of a health problem such as stroke or heart attack,
- c. heat and cold injuries,
- d. bodily injuries,

- e. body fatigue, and
  - f. venomous insects and reptiles.
  - g. skin burns associated with unprotected handling of caustic chemicals.
3. Hazards associated with being in or on the water:
- a. falling in streams and rivers/potential hypothermia or drowning, and
  - b. falling out of watercraft (Lake Capote only).

**G. Hazard (Evaluation and Control):**

1. The driver of a vehicle must possess a valid state drivers license and must have experience in operating a four wheel drive vehicle off-road and be insured under the Southern Ute Indian Tribe insurance policy.
2. Each vehicle will be equipped with a first aid kit, tire chains and at least one person will have a cell phone in his/her possession.
3. All participants should be screened for their relative physical fitness and health and thoroughly apprized of all safety requirements and precautions. All participants should be made aware of basic water rescue techniques and at least two personnel on each team must have current CPR/First Aid certification.

**H. Personal Protective Equipment Requirements:**

1. All team members will wear protective hip or chest waders when entering streams or rivers to include a waist belt. Waders and boots should be inspected for leaks before entering the water.
2. Protective gloves and appropriate protective eyewear must be worn when anyone is required to handle sample containers containing acids.
3. If determined by the team leader that wading in a stream or river is of some concern in terms of falling into the water, a personal flotation device (life jacket) may be required to worn. All personnel who use a boat to collect water samples on Lake Capote are required to wear a life jacket. Also, as determined by the team leader, in exceptionally high stream flow situations, sampling may be postponed indefinitely until safe flows are restored.
4. Polarized sunglasses are recommended to be worn to reduce the effects of glare.
6. Personnel will be advised to bring sufficient clothing to reduce the chance of heat or cold related injuries and be instructed to recognize their onset.

7. Sun screen and insect repellent is recommended for all team members, as appropriate.
8. In the event someone falls into a stream or river and needs assistance getting out, each team will be provided one throw bag.
9. Each participant will be advised to bring an adequate amount of potable liquid to minimize chances of body dehydration. As desired, individuals may also bring food for snacks.
10. Each team will have a fully equipped first aid kit **readily** available in case of emergency.

**I. Training Requirements:** Members of each team must have been currently certified in CPR and First Aid. Participants are required to review current SOP's that describe safe methods for conducting specific water quality analyses.

**J. Emergency Response:**

1. At least one cellular phone will be available per team for communication purposes in case of an emergency.
2. At least one vehicle per team shall be equipped with a VHF radio in case there is no cell phone coverage.

**K.** A tailgate safety meeting will be conducted prior to commencing field activities. A few selected safety issues will be identified and discussed amongst team members prior to leaving the SUIT parking area.

**L. Approval Signatures:**

1. Prepared by: Curtis Hartenstine, Water Quality Program Manager Date: August 5, 2015
1. Reviewed by: Tom Johnson, Environmental Programs Division Head Date: August 5, 2015

**N. Participants:**

Print Name

Signature

Date

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